

Title (en)

Device and process for manufacturing embossed substrates

Title (de)

Vorrichtung und Verfahren zur Herstellung geprägter Substrate

Title (fr)

Dispositif et méthode pour la fabrication de substrats estampés

Publication

EP 1480077 A3 20071226 (DE)

Application

EP 04010727 A 20040506

Priority

DE 10323365 A 20030521

Abstract (en)

[origin: EP1480077A2] Device for producing embossed substrates, especially with three-dimensional surface structures in the micro- and nano-region, comprises two pressing plates (1, 2) that can be moved relative to each other and hold a substrate (4), and at least one embossing matrix (1d, 2d) for embossing the substrate under the action of pressure and heat, optionally with other components, pressure cushions, etc. Before embossing, the embossing matrix and/or the substrate are aligned relative to each other perpendicularly to the displacement direction by actuators (6). The actuators comprise thermally activated expansion elements with adjustment paths controlled by heating and/or cooling. An independent claim is also included for the production of embossed substrates using the above device.

IPC 8 full level

G03F 7/00 (2006.01); **B29C 59/02** (2006.01); **B81C 1/00** (2006.01); **G03F 1/00** (2006.01)

CPC (source: EP)

B29C 59/02 (2013.01); **B81C 1/00** (2013.01); **B81C 99/0025** (2013.01); **B82Y 10/00** (2013.01); **B82Y 40/00** (2013.01); **G03F 7/0002** (2013.01); **B29C 2059/023** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

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